



re application of:

Docket No WEH-9376

David A. Spear et al.

Date:

July 25, 1996

Serial No.: 08/559,965

Art Unit:

3401 i

Filed:

November 17, 1995

Examiner:

M. Sgantzos

Title:

Swept Turbomachinery Blade

Commissioner of Patents and Trademarks Washington, DC 20231

Dear Sirs:

In response to the Official Action dated July 1, 1996, please amend the above identified application as follows:

In the Claims:

Please amend claim 1 as follows:

1. (Once amended). A turbomachinery blade for a turbine engine having a cascade of blades rotatable about a rotational axis so that each blade in the cascade has a leading neighbor and a trailing neighbor, and each blade cooperates with its neighbors to define flow passages for a working medium gas, the blade cascade being circumscribed by a case and under some operational conditions an endwall shock extends a limited distance radially inward from the case and also extends axially and circumferentially across the flow passages, and a passage shock also extends across the flow passages, the turbomachinery blade including an airfoil having a leading edge, a trailing edge, a root, a tip and an inner transition point located at an inner transition radius radially inward of the tip, the blade characterized in that at least a portion of the leading edge radially outward of the inner transition point is swept and a section of the airfoil radially coextensive with the endwall shock extending from the leading neighbor intercepts the endwall shock so that the endwall shock and the passage shock are coincident.